

Amendments to the Claims

The following listing of claims replaces all previously submitted listings:

1. (Currently Amended) A surgical device extending along an axis and having a proximal end and a distal end, the device being operable to move a suture through body tissue, comprising:

an elongate shaft having a hollow configuration;

a handle assembly coupled to the shaft;

an actuating rod having a proximal end and a distal end, the actuating rod being disposed to extend between the handle assembly and the shaft;

a needle assembly disposed at the distal end of the actuating rod and movable back and forth with the actuating rod between an extended state relative to the elongate shaft and a retracted state relative to the elongate shaft;

bifurcated portions of the needle assembly defining a suture slot, the bifurcated portions having a proximate relationship when the needle assembly is in the retracted state and having a separated relationship when the needle assembly is in the extended state;

the bifurcated portions of the needle assembly being ~~integral~~unitary with one another;

a sharp distal tip of the needle assembly being ~~integral~~unitary with at least one of the bifurcated portions;

the needle assembly being biased to the retracted state; and

the bifurcated portions being biased to the separated relationship.

2. (Canceled)

3. (Original) The surgical device recited in Claim 1 wherein the bifurcated portions include a backing arm and a gathering arm that define the suture slot with a proximal end and a distal end.

4. (Original) The surgical device recited in Claim 3 wherein portions of the gathering arm define a passage into the suture slot.

5. (Original) The surgical device recited in Claim 4 wherein the portions of the gathering arm are disposed closer to the proximal end of the suture slot than the distal end of the suture slot.

6. (Original) The surgical device recited in Claim 4 wherein the portions of the gathering arm are disposed closer to the distal end of the suture slot than the proximal end of the suture slot.

7. (Original) The surgical device recited in Claim 3 wherein the bifurcated portions of the needle assembly have an outer surface in the shape of a cylinder.

8. (Withdrawn) The suture device recited in Claim 1 wherein the bifurcated portions are first bifurcated portions defining a first slot, and the device further comprises:

second bifurcated portions included in the needle assembly and defining a second suture slot.

9. (Withdrawn) The surgical device recited in Claim 1 wherein the suture slot has a tapered configuration.

10. (Original) The surgical device recited in Claim 6 wherein the gathering arm in the retracted position of the needle assembly is free to contact the backing arm.

11. (Withdrawn) The surgical device recited in Claim 6, wherein:
the passage is defined by a proximal portion of the gathering arm and a distal portion of the gathering arm, and the needle assembly further comprises:
a stop formed on the distal portion of the gathering arm to prevent the proximal portion of the gathering arm from contacting the backing arm in the retracted position of the needle assembly.

12. (Withdrawn) The surgical device recited in Claim 7 wherein at least one of the proximal end and distal end of the slot is rounded to inhibit suture damage.

13. (Currently Amended) A surgical suturing device, including:
a needle assembly having a needle movable in a needle housing between a free suture state, a captured suture state, and a locked suture state;
bifurcated portions of the needle assembly defining a suture slot, the bifurcated portions having a proximate relationship when the needle assembly is in the captured suture state and having a separated relationship when the needle assembly is in the free suture state;
the bifurcated portions of the needle assembly being integral-unitary with one another;

a sharp distal tip of the needle assembly being ~~integral~~unitary with at least one of the bifurcated portions;

a handle assembly including a longitudinal handle housing sized and configured to releasably receive the needle assembly;

a thumb slide assembly releasably coupled to the needle and movable longitudinally on the handle housing between a distal position and a proximal position;

the distal position of the thumb slide assembly being associated with the needle in the free suture state; and

the proximal position of the thumb slide assembly being associated with the needle in the captured suture state and the locked suture state.

14. (Canceled)

15. (Original) The surgical suturing device recited in Claim 13 wherein the handle housing and the thumb slide form a ratchet at the distal position of the thumb slide assembly.

16. (Original) The surgical suturing device recited in Claim 13, further comprising:

a needle lock included in the thumb slide assembly and having a releasable locking relationship with the needle.

17. (Original) The surgical suturing device recited in Claim 16, further comprising:

a needle housing lock carried by the handle housing and having a releasable locking relationship with the needle housing.

18. (Original) The surgical suturing device recited in Claim 17, wherein:
the needle housing lock is pivotal on the handle housing between an unlocking position and a locking position.

19. (Original) The surgical suturing device recited in Claim 18, further comprising:

a locking detent slidable on the handle housing between a first position wherein the needle housing lock is pivotal on the handle housing to the unlocking position, and a second position wherein the needle housing lock is held in the locking position.

20. (Original) The surgical suturing device recited in Claim 19 wherein the second position of the locking detent is distal of the first position of the locking detent.

21. (Original) The surgical suturing device recited in Claim 13, wherein:
the thumb slide has a detent position between the distal position and the proximal position;

the thumb slide in the detent position is associated with the handle in the captured suture state and an unlocked suture state; and

the thumb slide in the proximal position is associated with the needle in the captured suture state and a locked suture state.

22. (Currently Amended) A method for placing suture across a body wall of a patient, comprising the steps of:

providing a suture device including a hollow shaft with a proximal end and a distal end, an actuating rod disposed in the shaft, and a needle assembly carried within the hollow shaft and moveable by the rod between a deployed position relative to the hollow shaft and a retracted position relative to the hollow shaft;

providing the needle assembly with a needle having a sharp distal tip;

bifurcating the needle to form at least one pair of arms that are unitary and defining a suture slot, with at least one arm being separated from the others at one of a distal end or a proximal end to permit suture to enter the suture slot, the arms being movable between a proximate position associated with a first slot size and a spaced position associated with a second slot size greater than the first slot size;

penetrating the body wall with a needle assembly in the retracted position and the arms in the proximate position; and

advancing the needle assembly to the deployed position to move the arms to the spaced position associated with the second slot size.

23. (Original) The method recited in Claim 22 further comprising the step of:

forming a channel in one of the arms to provide for side-loading of the suture into the suture slot.

24. (Original) The method recited in Claim 23 wherein the slot has a proximal end and a distal end and the forming step includes the step of forming the channel in proximity to the distal end of the slot.

25. (Withdrawn) The method recited in Claim 23 wherein the slot has a proximal end and a distal end and the forming step includes the step of forming the channel in proximity to the proximal end of the slot.

26. (Withdrawn) The method recited in Claim 22 wherein the providing step further comprises the step of rounding at least the distal end of the slot.

27. (Withdrawn) The method recited in Claim 22 wherein the providing step includes the step of forming at least one proximally-facing shoulder on the needle to define the retracted position where the shoulder contacts the hollow shaft.